

IN THE CLAIMS

1. (Currently Amended) ~~Swelled~~ A swelled dielectric cellular electret film, said cellular film containing flat gas bubbles, wherein the film contains partial discharges inside the film produced in the gas bubbles to achieve improved electrical ~~properties.~~ properties, and wherein the film is pressure inflated from a prefoamed plastic film.
2. (Currently Amended) ~~Swelled~~ The swelled dielectric cellular electret film according to claim 1, wherein the film has partial discharges produced in the gas bubbles and the charges are caused to move into the dielectric material of the film as a result of the film being provided with a large internal unipolar charge created by charging the film by means of an electric DC field intensive enough to produce partial discharges in the gas bubbles and to cause the charges to move into the dielectric material of the film.
3. (Cancelled).
4. (Currently Amended) ~~Swelled~~ The swelled dielectric cellular electret film according to claim 1, wherein the film has at least one film layer foamed to be of full-cell type, and wherein the film has been oriented by stretching it in two directions.
5. (Currently Amended) ~~Dielectric~~ A dielectric cellular electret film, said cellular film containing flat gas bubbles, wherein the film is a swelled dielectric cellular electret film; wherein the film has at least one film layer foamed to be of full-cell type, wherein the film has been

oriented by stretching it in two directions, ~~and~~ wherein the film contains partial discharges inside the film produced in the gas bubbles to achieve improved electrical ~~properties.~~ properties, and wherein the film is pressured inflated from a prefoamed plastic film.

6. (Currently Amended) ~~Transducer~~ A transducer element having one or several swelled dielectric cellular electret films, said cellular films containing flat gas bubbles, wherein the film contains partial discharges inside the film produced in the gas bubbles to achieve improved electrical ~~properties.~~ properties, and wherein the film is pressure inflated from a prefoamed plastic film.

7. (Currently Amended) ~~Transducer~~ The transducer element according to claim 6, wherein the film has partial discharges produced in the gas bubbles and the charges are caused to move into the dielectric material of the film as a result of that the film is provided with a large internal unipolar charge created by charging the film by means of an electric DC field intensive enough to produce partial discharges in the gas bubbles and to cause the charges to move into the dielectric material of the film.

8. (Currently Amended) ~~Transducer~~ The transducer element according to claim 6 comprising at least one cellular electret film, at least one signal electrode and at least two ground electrodes, wherein

the transducer element is a electret film, containing a permanent electric charge,

the film being a cell-type electret film, and

the transducer part has a laminated structure, where at least the signal electrode is disposed on the surface of the electret film or another dielectric film.

9. (Currently Amended) ~~Transducer~~ The transducer element according to claim 8 wherein the transducer has a unitary laminated structure, where the signal and ground electrodes have been disposed on the surface of the dielectric films and continue unitary from the transducer part as a connection element part, whereby the electrodes extend from the transducer part as connection element part for connecting the transducer to a signal processing device.

10. (Currently Amended) ~~Transducer~~ The transducer element according to claim 8, wherein the element has at least two transducer film elements, at least one of the elements having different electric charges on their surfaces.

11. (Currently Amended) ~~Self-adhesive~~ A self-adhesive film self-adhesive by virtue of an electrostatic force comprising a swelled dielectric cellular electret film, said cellular films containing flat gas bubbles, wherein the film contains partial discharges inside the film produced in the gas bubbles to achieve improved adhesive ~~properties.~~ properties, and wherein the film is pressure inflated from a prefoamed plastic film.

12. (Currently Amended) ~~Self-adhesive~~ The self-adhesive film according to claim 11, wherein the film has partial discharges produced in the gas bubbles and the charges are caused to move into the dielectric material of the film as a result of that the film is provided with a large internal unipolar charge created by charging the film by means of an electric DC field intensive

enough to produce partial discharges in the gas bubbles and to cause the charges to move into the dielectric material of the film.

13. (Currently Amended) ~~Swelled~~ A swelled film of dielectric material, self-adhesive by virtue of an electrostatic force, which film contains gas bubbles preferably of a flat shape, wherein, to achieve an adhesive quality of the film, the film is given a large internal unipolar charge, which is created by charging the film by means of an electric field intensive enough to produce partial discharges in the gas bubbles and to cause the charges to move into the dielectric material of the ~~film~~ film, and wherein the film is pressure inflated from a prefoamed plastic film.

14. (Currently Amended) ~~Film~~ The film as defined in claim 13, wherein the film is coated with a slightly adhesive layer.

15. (Currently Amended) ~~Film~~ The film as defined in claim 13, wherein, to adjust the adhesion of the film, one or both of its surfaces are subjected to an AC corona treatment before charging.

16. (Currently Amended) ~~Film~~ The film as defined in claim 13, wherein, to increase the net charge created inside the film, the film is doped with charge binding additives.

17. (Currently Amended) ~~Film~~ The film as defined in claim 13, wherein certain areas of the film contain a positive charge while the other areas have a negative charge.

18.-26. (Cancelled).

27. (Currently Amended) A self-adhesive swelled cell type dielectric film, self-adhesive by virtue of an electrostatic force, said swelled cell type film lying flat on a flat surface without manipulation, said swelled cell type film containing flat gas blisters, ~~and~~ said film containing partial discharges inside the film produced in the gas blisters to achieve an adhesive quality of the film. film, and said film is pressure inflated from a prefoamed plastic film.

28. (Currently Amended) A ~~The~~ self-adhesive cell type dielectric film according to claim 27, wherein said partial discharges move into the dielectric material of the film, the film is provided with a large internal unipolar charge created by charging the film by means of an electric DC field intensive enough to produce partial discharges in the gas blisters and to cause the charges to move into the dielectric material of the film.

29. (Currently Amended) ~~Film~~ The film as defined in claim 27, wherein to adjust the adhesion of the film, one or both of its surfaces are subjected to an AC corona treatment before charging.

30. (Currently Amended) ~~Film~~ The film as defined in claim 27, wherein the film is coated with a adhesive sticky layer.

31. (Currently Amended) ~~Film~~ The film as defined in claim 27, wherein to increase a net charge created inside the film, the film is doped with charge binding additives.

32. (Currently Amended) ~~Film~~ The film as defined in claim 27, wherein certain areas of the film contain a positive charge while the other areas have a negative charge.

33. (Currently Amended) ~~Film~~ The film as defined in claim 31, wherein the charge binding additive is ferrochloride.

1 ~~34.~~ (Currently Amended) ~~Dielectric~~ A dielectric cellular electret film, said cellular film containing flat gas bubbles, wherein the film contains partial discharges inside the film produced in the gas bubbles to achieve improved electrical properties, the film not being coated with an electrically conductive layer.

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~~35.~~ (Currently Amended) ~~Dielectric~~ The dielectric cellular electret film according to claim ~~34,~~ wherein the film has partial discharges produced in the gas bubbles and the charges are caused to move into the dielectric material of the film as a result of the film being provided with a large internal unipolar charge created by charging the film by means of an electric DC field intensive enough to produce partial discharges in the gas bubbles and to cause the charges to move into the dielectric material of the film.

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~~36.~~ (Currently Amended) ~~Dielectric~~ The dielectric cellular electret film according to claim ~~34,~~ wherein the film is a swelled dielectric cellular electret film.

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37. (Currently Amended) ~~Dielectric~~ The dielectric cellular electret film according to claim 34, wherein the film has at least one film layer foamed to be of full-cell type, and wherein the film has been oriented by stretching it in two directions.

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38. (Currently Amended) ~~Dielectric~~ A dielectric cellular electret film, said cellular film containing flat gas bubbles, wherein the film is a swelled dielectric cellular electret film; wherein the film has at least one film layer foamed to be of full-cell type, wherein the film has been oriented by stretching it in two directions, and wherein the film contains partial discharges inside the film produced in the gas bubbles to achieve improved electrical properties, the film not being coated with an electrically conductive layer.

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39. (Currently Amended) ~~Transducer~~ A transducer element having one or several swelled dielectric cellular electret films, said cellular films containing flat gas bubbles, wherein the film contains partial discharges inside the film produced in the gas bubbles to achieve improved electrical properties, the film not being coated with an electrically conductive layer.

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40. (Currently Amended) ~~Transducer~~ The transducer element according to claim 39, 6
wherein the film has partial discharges produced in the gas bubbles and the charges are caused to move into the dielectric material of the film as a result of the film being provided with a large internal unipolar charge created by charging the film by means of an electric DC field intensive enough to produce partial discharges in the gas bubbles and to cause the charges to move into the dielectric material of the film.

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~~41.~~ (Currently Amended) ~~Transducer~~ The transducer element according to claim ~~39,~~
comprising at least one cellular electret film, at least one signal electrode and at least two ground
electrodes, wherein

the transducer element is a electret film, containing a permanent electric charge,

the film being a cell-type electret film, and

the transducer part has a laminated structure, where at least the signal electrode is
disposed on the surface of the electret film or another dielectric film.

9 8
~~42.~~ (Currently Amended) ~~Transducer~~ The transducer element according to claim ~~41,~~
wherein the transducer has a unitary laminated structure, where the signal and ground electrodes
have been disposed on the surface of the dielectric films and continue unitary from the
transducer part as a connection element part, whereby the electrodes extend from the transducer
part as connection element part for connecting the transducer to a signal processing device.

10 8
~~43.~~ (Currently Amended) ~~Transducer~~ The transducer element according to claim ~~41,~~
wherein the element has at least two transducer film elements, at least one of the elements having
different electric charges on their surfaces.

11
~~44.~~ (Currently Amended) ~~Self-adhesive~~ A self-adhesive film self-adhesive by virtue of an
electrostatic force comprising a dielectric cellular electret film, said cellular films containing flat
gas bubbles, wherein the film contains partial discharges inside the film produced in the gas

bubbles to achieve improved adhesive properties, the film not being coated with an electrically conductive layer.

12
~~45~~. (Currently Amended) ~~Self-adhesive~~ The self-adhesive film according to claim ~~44~~, //

wherein the film has partial discharges produced in the gas bubbles and the charges are caused to move into the dielectric material of the film as a result of the film being provided with a large internal unipolar charge created by charging the film by means of an electric DC field intensive enough to produce partial discharges in the gas bubbles and to cause the charges to move into the dielectric material of the film.

13
~~46~~. (Currently Amended) ~~Film~~ A film of dielectric material, self-adhesive by virtue of an electrostatic force, which film contains gas bubbles preferably of a flat shape, wherein, to achieve an adhesive quality of the film, the film is given a large internal unipolar charge, which is created by charging the film by means of an electric field intensive enough to produce partial discharges in the gas bubbles and to cause the charges to move into the dielectric material of the film, the film not being coated with an electrically conductive layer.

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~~47~~. (Currently Amended) ~~Film~~ The film as defined in claim ~~46~~, wherein the film is coated with a slightly adhesive layer. 13

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~~48~~. (Currently Amended) ~~Film~~ The film as defined in claim ~~46~~, wherein, to adjust the adhesion of the film, one or both of its surfaces are subjected to an AC corona treatment before charging. 13

16 13
~~49.~~ (Currently Amended) ~~Film~~ The film as defined in claim ~~46~~, wherein, to increase the net charge created inside the film, the film is doped with charge binding additives.

17 13
~~50.~~ (Currently Amended) ~~Film~~ The film as defined in claim ~~46~~, wherein certain areas of the film contain a positive charge while the other areas have a negative charge.

51.-59. (Withdrawn).

18 ~~60.~~ (Previously Presented) A self-adhesive cell type dielectric film, self-adhesive by virtue of an electrostatic force, said cell type film lying flat on a flat surface without manipulation, said cell type film containing flat gas blisters, and said film containing partial discharges inside the film produced in the gas blisters to achieve an adhesive quality of the film, the film not being coated with an electrically conductive layer.

19 ~~61.~~ (Currently Amended) A The self-adhesive cell type dielectric film according to claim ~~60~~, wherein said partial discharges move into the dielectric material of the film, the film being provided with a large internal unipolar charge created by charging the film by means of an electric DC field intensive enough to produce partial discharges in the gas blisters and to cause the charges to move into the dielectric material of the film.

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~~62.~~ (Currently Amended) ~~Film~~ The film as defined in claim ~~60~~, wherein to adjust the adhesion of the film, one or both of its surfaces are subjected to an AC corona treatment before charging.

²²
~~63.~~ (Currently Amended) ~~Film~~ ¹⁸ The film as defined in claim ~~60~~, wherein the film is coated with an adhesive sticky layer.

²³
~~64.~~ (Currently Amended) ~~Film~~ ¹⁸ The film as defined in claim ~~60~~, wherein to increase a network charge created inside the film, the film is doped with charge binding additives.

²⁴
~~65.~~ (Currently Amended) ~~Film~~ ¹⁸ The film as defined in claim ~~60~~, wherein certain areas of the film contain a positive charge while the other areas have a negative charge.

²⁰
~~66.~~ (Currently Amended) ~~Film~~ ¹⁹ The film as defined in claim ~~61~~, wherein the charge binding additive is ferrochloride.